## **ICSF & CSF Intro Course Glossary of Terms**

## Glossary of Terms & Acronyms

Backend Node - Dedicated node for performing computational tasks.

**Batch System** - Compute system that works through a queue or batch of separate jobs without manual intervention

**CIR** - Computational Intensive Research

Core - Dedicated processing unit found within a CPUS/GPUS - Modern CPU/GPUs contain multiple cores

**CPU** - Central Processing Unit - Component for interpreting and executing most of the commands from the computer's other hardware and software.

CSF - Computational Shared Facility - High Performance Compute cluster primarily designed for batch computing

**Firewall -** Security mechanism for controlling connections in and out of various systems - Can be hardware or software based.

**GUI** - Graphical User Interface - Interface that uses icons or other visual indicators to interact with electronic devices, rather than via a command line

**GPU** - Graphics Processing Unit - Their highly parallel structure makes them more efficient than general-purpose central processing units (CPUs) for processing large chunks of data data in parallel.

**iCSF** - Interactive Computational Shared Facility - High Performance Compute cluster designed for interactive computing. Also referred to as incline

Login Node - Dedicated node for accepting requests and routing them to a backend node or job queue.

Parallel Job - Multiple processors executing multiple tasks simultaneously

**RDS** - Research Data Storage - Centrally-hosted and administered data storage for use by research staff and research students also referred to as isilon.

**RVDS** - Research Virtual Desktop Service - Provides access to various UoM Research IT provided platforms from anywhere in the world.

**RVMS** - Research Virtual Machine Service - Centrally hosted virtual machines.

**SCP** - Secure Copy Protocol - File Transfer protocol/program which utilises SSH in order to transfer files in a secure manner.

Serial Job - Single processor completes one task at a time one after the other.

**SSH -** Secure Shell - Provides a secure (encrypted) connection between a client and a server.

**VM** - Virtual Machine - A self-contained computer running on the hardware of another functional computer.